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IS VIDEO-CASE AN EFFICIENT TOOL TO COMPLEMENT THE PRACTICAL LEARNING IN REAL CONTEXTS? EFFECTS ON SATISFACTION AND PERFORMANCE IN SOCIAL WORK DEGREE STUDENTS[1]

¿Es el video-caso una herramienta eficiente para complementar el aprendizaje práctico en contextos reales? Efectos en la satisfacción y rendimiento en estudiantes del Grado de Trabajo Social

María Aranda López[2], Marta García-Domingo[3] & Virginia Fuentes Gutiérrez[4]

Abstract

The study aims to assess the impact of the video-case as an additional support tool in Social Work learning practice. The practical character of the discipline requires assessing the practical knowledge acquisition through different teaching and learning methodologies. The research was conducted with 118 Social Work Degree Students at the University of Jaén (Spain). Participants were randomly assigned to two conditions: face-to-face class (control group) vs. audiovisual class (experimental group). Both video-cases and learning were focused on Family Treatment Teams functioning in Spain. After watching the video or attending the class, participants filled in two questionnaires: The General Satisfaction Scale and the Performance Test. Among other results, ANOVA showed that participants in the audiovisual condition assessed the acquisition of skills and cognitive processes (memory and attention) better than those in the face-to-face condition. Meanwhile, the performance was not affected by the condition assigned. In conclusion, this research proves the positive effect of video-cases in Social Work practical learning processes as an extra tool.

Keywords: video-cases; Social Work; Family Treatment Teams; practical learning; teaching strategies.

Resumen

El estudio tiene como objetivo evaluar el impacto del video-caso como una herramienta de apoyo adicional el aprendizaje práctico del Trabajo Social. El carácter práctico de la disciplina requiere la evaluación de la adquisición de conocimientos prácticos a través de diferentes metodologías de enseñanza y aprendizaje. La investigación se realizó con 118 estudiantes de Grado en Trabajo Social de la Universidad de Jaén (España). Los participantes fueron asignados aleatoriamente a dos condiciones: clase magistral presencial (grupo control) y clase audiovisual con video-casos (grupo experimental). Ambos, video-casos y enseñanza en el aula, se centraron en el funcionamiento de los Equipos de Tratamiento Familiar (ETF) en España. Después de ver el video o asistir a la clase, los participantes cumplimentaron dos cuestionarios: la Escala de Satisfacción General y de la Prueba de Rendimiento. Entre otros resultados, ANOVA mostró que los participantes en la condición audiovisual evalúan mejor la adquisición de habilidades y procesos cognitivos (memoria y atención) que aquellos en la condición presencial (clase magistral). Sin embargo, el rendimiento no se vio afectado por la condición asignada. En conclusión, esta investigación demuestra el efecto positivo de video-casos en los procesos de aprendizaje prácticos de Trabajo Social, como una herramienta útil de apoyo adicional.

Palabras clave: video-cases; Trabajo Social; Equipos de Tratamiento Familiar; aprendizaje práctico; estrategias de enseñanza.

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Introduction

Spanish Universities, in order to facilitate the exchange of graduates and educational convergence through the European Union, were incorporated into the Bologna Process in 2008/2009 (Avedaño, 2011). This process has dramatically changed the structures of higher education throughout the European Space (Agenda Executive Education, Audiovisual and Culture, 2012). Apart from assuming the ECTS (European Credit Transfer System)[5], another relevant change has occurred: the recognition of the importance of small-sized groups and the acquisition of practical skills.

In this context, the Social Work Degree is also involved in these dynamic changes. One of its basic pillars is to create a catalog of skills which clearly indicates the performance of social workers. Moreover, the learning of these skills constitutes the focal point of the whole training process (Vázquez, Álvarez, & Moya, 2011). Taking this reality as a starting point, we analyze the usefulness of teaching methods based on multimedia elements –i.e. video– that are used as a way to replace the acquisition of practical skills in real learning contexts. Specifically, the study was implemented in the core subject Individual/Family Social Work, training given in the second year of the Social Work Degree. The course has 6 ECTS, of which 3.5 ECTS are theoretical (classes in large group), 1.5 ECTS are practical, and 1 refers to (collective and individual) tutorials. This is a compulsory subject approved by the Spanish System of Higher Education for the Social Work Degree at the University of Jaén. A significant number of competencies and learning outcomes are directly related to the development of skills in real situations. For instance, some of the competencies compiled in the Subject Guide and the Degree Plan are: (1) acting to resolve risk situations, (2) responding to crisis situations, or (3) to interact with individuals, families, groups, organizations and communities to achieve change, promote their development and improve living conditions. In any case, it seems contradictory that despite their eminent practical implementation, only 37.5 hours (25%) of the total teaching load are dedicated to this labor.

These objectives could be achieved through the observation of situations in real contexts (real experiences in natural environments). This method has been proven to improve the learning of a wide variety of social task in various disciplines of knowledge (Ferrari, 1996; Hodges, Williams, Hayes, & Breslin, 2007). However, the access to real examples in their natural environments is highly complicated in the case of social work, and in many cases is impossible.

5. http://ec.europa.eu/education/ects/ects_en.htm

The problems associated with such participation are frequently related to the availability of resources, the time involved and, mainly, the impossibility to be present in a real intervention for ethical reasons (Bermejo, 1996). Therefore, it becomes necessary to find a different form to supply the benefits of real intervention experiences.

Thus, teachers face two important barriers to enable students to achieve these learning objectives: the reduced time devoted to practical training and the restricted access to real learning contexts. The question seems to be: How to provide the acquisition of knowledge, skills and practical techniques that leads students to develop a successful job performance? Gijón, Domínguez, & Conejo (2012) suggest promoting the relationship between theory and practice through the use of innovative teaching-learning spaces and methodologies.

In many educational context the problem has been dealt by the inclusion of methodologies and tools based on information technologies (e.g., Boer, Kommers, & Brock, 2011; Judd & Kennedy, 2010; Masats & Dooly, 2011; Torres-Ramírez, García-Domingo, Aguilera, & De la Casa, 2014) such as audiovisual material.

Audiovisual material as solution of the lack of practice

The benefits of using virtual tools in the teaching-learning process is increasingly accepted (Jonassen, Howland, Moore, & Marra, 2003; Smith, 2002; Young, 2002).

Considering the pedagogical application of technology, the audiovisual environment is a useful tool in the practical training program of many materials (Marcelo, 2001), being also configured as an important motivator for students in their teaching-learning process (Escudero, 1989). However, we consider –as well as other authors cited before–, that these methods will be educational to the extent that are evaluated, selected and integrated by the lecturer in a specific educational context (Knight & Wood, 2005). Increasingly, researchers underline the mediating role of communicative practices based on technological mediation (García-Carbonell, Rising, Montero, & Watts, 2001; Kendon, 2004; Thorne & Reinhardt, 2008; Zheng, Young, & Wagner, 2009 in Masats & Dooly, 2011). Previous investigations have found the following benefits from the audiovisual learning: (1) it reduces the time involved in the acquisition and understanding of the information (Eze, 2013); (2) it stimulates interest and promotes attention processes; (3) it transmits the information in a simple, pleasant manner and with little effort by the receptor; (4) it stimulates the ability to synthesize and to establish relationships among

information; (5) it encourages participation (Natoli, 2011) and actions of advanced education; (6) it reinforces and expands the curriculum through the group work and the feedback; (7) it makes learning permanent because it audiovisual allows students to visualize what is learned (Dike, 1993).

The specific use of videos

The use of videos in educational environments is quite common (Özkan, 2002; Masats, Sormunen, Hacklin, & Ducos, 2007), mainly in recent decades. Despite its rapid progress and generalization in Higher Education Spaces, the specific function of videos in learning processes needs to be analyzed in depth (Masats & Dooly, 2011). A review of the literature allows us to affirm that videos are valid for constructing knowledge and developing reflective skills. Teachers have greatly benefited from their potential applying in three different ways. The first one is called «video– viewing», and it is often used as a method to focus attention on certain topics and to set up a base for class discussion and assignments (Masats & Dooly, 2011). The second way to use videos is «videomodelling», which allows focusing attention on target skills or behavior. The roots of videomodelling can be found in the learning through observation of a person engaged in a target behavior and the imitation of the model (Charlop-Christy, Le, & Freeman, 2000). In this regard, Downing (2005) was one of the first authors who concluded through his studies the effectiveness of videomodelling in a variety of settings with a variety of populations. Finally, video-coaching refers to the use of taped activities of the student-teachers themselves which then lead into group discussion.

In terms of video implementation, Sherin (2004) pointed out some applications such as microteaching, lesson analysis, modeling of experts, videocases, and supervising student's performance by the instructor. In the present study we focused on video-cases in its «video– viewing» and «videomodelling» forms. Based on previous literature, we consider that using videos as a pedagogical strategy to supply real practices benefits is justified due to its modelling and coaching role. By introducing audiovisual materials in class, lectures intend to show a «way of being» in professional contexts, which is consistent with the educational lines prevailing in Higher Education Spaces.

In the set of studies carried out by Masats & Dooly (2011), authors analyzed the effectiveness of video-use in education through the three forms explained above. They found that *videos achieved higher critical awareness and increased the understanding of content in different situations* (Masats & Dooly, 2011, p. 1160, 61). Authors noted that videos even entail benefits for teachers through helping to clarify the ideas of how to design and plan project-based

learning sequences and how to integrate different uses of video into their teaching. Besides, Schwan & Riempp (2004) verified that media-based information presentations are not only valid reproductions of information, but also instrument for information processing. They also pointed out that this method provides to the authors a greater degree of freedom that allows the viewer to perceive even more things than in a real observation experience.

Clearly, all these previous findings are relevant and confirm the benefits of introducing video-cases classes. However, as we noted in the first paragraphs, it should be evaluated in many different ways; taking into account the impact not only on cognitive processes related learning (e.g., attention or memory), as traditional research do, but also on the explicit metacognitive processes (e.g., satisfaction or perception about their cognitive processes). In addition, there is a question that remains without a clear response: what kind of content is better to learn through videos? Finally, we consider that to extract solid conclusions it is necessary to introduce a term of comparison, since it is difficult to solve all the above issues in absolute terms.

Therefore, taking into account the rising use of audiovisual material in Higher Education Spaces, and the research questions raised, we propose in the present study the evaluation of a video as an additional support to the lectures in the Social Work Degree at the University of Jaén. Specifically, we assess the effect of a video that contains information about family intervention on two dependent variables: (1) Students' satisfaction in different areas (e.g., material quality, acquisition of skills or acquisition of theory); (2) Performance in a test that measures de short-term learning. Moreover, we analyzed the influence of two sociodemographic variables (sex and shift) with a double aim; on one hand to control the effect of strange variables, on the other hand to broaden our knowledge of their function in the study. To obtain a «baseline» that allows comparing the results, we used two conditions. One of them considered as experimental condition (audiovisual class) and the other one defined as control condition (face-to-face class).

Method

Participants

The research was performed with 118 students from the University of Jaén (Spain). All of them are currently attending their second (94.1%) or third year (5.9%) in Social Work Degree. Of the total participants, 83.1% were women and 16.9% were men. The age ranged between 19 and 37, with an average age of 21.64 (*SD* = 3.05). Two groups depending of their schedule took part into

the study: morning (47.5%) and afternoon shift (52.5%). Participants of both groups were randomly assigned to two conditions: face-to-face class (50%) vs. audiovisual class (50%).

Procedure

The study was performed during the academic course 2014/15. Participants carried out the same sequence of steps, both in face-to-face and audiovisual class. Firstly, they were instructed to pay attention to the information received and to avoid taking notes. Instructions were similar for both conditions, and participants were informed of the voluntary and anonymous nature of their participation. They also signed an informed consent regarding the aims of the experiment and the publication of the results and the snapshots taken during the experiment. Immediately after the instructions, they watched the video or they listened to the teacher during 10 minutes approximately. Then, participants filled two questionnaires: The *General Satisfaction Scale and the Performance Test* (own elaboration, see table 1 and 2).

Regarding the two questionnaires, to avoid the bias due to the order of the items, they were randomized. Direct and inverse items were used in the General Satisfaction Scale to eliminate bias in participants' responses.

Audiovisual class. This condition was executed in a computer room, where each student could use a computer individually. The teacher immediately before viewing the video uploaded it to the Platform of Virtual Teaching ILIAS[6]. This platform is a virtual space that allows Lecturers to upload teaching material on the Internet, managing the access to it. Moreover, ILIAS is a collaborative space between teacher and students. After watching the video (10 minutes and 30 seconds), each student filled in both questionnaires individually and anonymously.

Face-to-face class. The explanation lasted around 10 minutes. The content was similar to the audiovisual material. A PowerPoint[7] presentation without images was used to support the face-to-face class. The use of presentations is widespread among teachers. Its use also helped us to control the time and to objectify the information.

6. http://ev.ujaen.es/formacion/goto_formacion_pg_49252_28556.html
7. a) What is a Family Treatment Team? Conceptual approach, type of interventions, mission and values; b) Professionals involved in the FTT; c) Strategies; d) Origin and evolution; e) Cases management: the helplessness state declaration, f) Institutional coordination; g) Real cases.

The same procedure was performed by the same lecturer in two shifts (morning and afternoon).

It has to be taken into account that the context was managed to be suitable in both conditions. Hillman, Willis, & Gunawardena (1994) argued that, during the technology-mediating learning, all kind of interchanges can have great negative effects on it, particularly when learners are unfamiliar with the communication technologies. Due to it, all type of transfers which may distort the learning process was avoided. Besides, the interaction of the instructor in the audiovisual condition was minimum and it only took place before the beginning of the video. The interaction between students was avoided by the use of individual earphones. In addition, Race (1995) and many other experts agree that short segment videos optimize learners´ concentration. Because of it, we considered that the video should be shortened and we selected the main part.

Materials

In order to answer our research objectives two instruments were elaborated (General Satisfaction Scale and Performance Test). Moreover, an audiovisual material was used.

1. *General Satisfaction Scale*. It was composed of 15 items, with a 5-point Likert response scale. As well as other researchers (Arteaga-Sánchez, Cortijo, & Javed, 2014; Asoodar, Atai, Vaezi, & Marandi, 2014; Cheng, 2014; Ibáñez, Di Serio, Villarán, & Delgado-Kloss, 2014; Torres-Ramírez et al., 2014), we considered that this 5-points version was the best adapted to our research, identifying positive, negative and neutral attitudes. Some of the items were adapted from «General Degree of Satisfaction Questions» proposed by Torres-Ramírez et al., 2014. The responses range from 'totally disagree' (1) to 'totally agree' (5). The purpose of the scale was to evaluate student satisfaction in five areas: materials quality, acquisition of skills, acquisition/consolidation of theoretical knowledge, cognitive processes related to learning and overall satisfaction. Two versions of the scale were implemented depending on the group, face-to-face or audiovisual. Once reversed scores of inverse items (5, 9, 12 and 14), the higher score the greater satisfaction with the method evaluated. Items of the scale are compiled in Table 1. The reliability of the scale according to Cronbach alpha was α =.65.

Table 1. Items of the General Satisfaction Scale

Materials quality.
1. The theoretical concepts are clearly explained in the video/by the teacher (*item 3 after randomization). 2. The duration of the video/face-to-face class is suitable to obtain a global view of the presented issue (*item 8 after randomization). 3. The video/ face-to-face class is adapted to the educational level and stage (*item 11 after randomization).
Acquisition of skills.
4. The video/face-to-face class is useful to show real applications in family intervention (*item 6 after randomization). 5. The concepts explained during the video/face-to-face class do not complement the understanding of the processes and techniques used in social intervention (*item 12 after randomization). 6. The video/face-to-face class does not facilitate the learning of specific skills for intervention in real cases of family intervention (*item 9 after randomization). 7. Audiovisual material/face-to-face class is worse to learn practical contents than traditional teaching/audiovisual material (*item 5 after randomization).
Acquisition/consolidation of theoretical knowledge.
8. The theory concepts are assimilated just after the video reproduction/the face-to-face class (*item 13 after randomization). 9. My previous knowledge about family intervention has increased after watching the video/ attending the face-to-face class (*item 1 after randomization). 10. The doubts related to the theoretical concepts previously studied are solved in a faster and easy way (*item 7 after randomization). 11. Audiovisual material/ face-to-face class is worse to learn theoretical contents than traditional teaching/ Audiovisual material (*item 14 after randomization).
Cognitive processes related to learning.
12. The video/face-to-face class makes easier the memorization of the content to learn (*item 10 after randomization). 13. I find harder to pay attention to a video than to a teacher (*item 15 after randomization). 14. The use of multimedia material/face-to-face teaching allows the reduction of time employed to learn the concepts (*item 4 after randomization).
Overall satisfaction.
15. Learning through audiovisual material/face-to-face class is highly satisfactory (*item 2 after randomization).

2. *Performance test*. The test consists of 15 items which evaluate the learning of the content during the class, both in the face-to-face and audiovisual exposure. Each question had three possible answers associated, being only one correct. Two types of questions were assessed: practical intervention (skills and techniques), and theoretical aspects

Table 2. Items of the Performance Test.

Skills and practical intervention.
1. Some strategies to promote the communication used by the Social Worker are…
2. When improvements are seen in the family, the Social Worker…
3. Family Treatment Team assumes the cases of Mijas (Spain) because…
4. Parents in the Mijas' case…
5. The beginning of the treatment requires…
Theoretical aspects.
6. The Family Treatment Teams consists of…
7. The mission of the Family Treatment Team is…
8. What is a Family Treatment Team?
9. The type of intervention of Family Treatment Team is…
10. The cases reach the Family Treatment Equipment through the derivation of…
11. The professionals who form a Family Treatment Teams are…
12. When cases are complex the intervention...
13. The declaration of the state of helplessness implies…
14. When did Family Treatment Teams started to work in Andalucía (Spain)?
15. The transfer of a case from the Community Treatment Team to the Family Intervention Team, in a Community Social Services Center, occurs through…

(Table 2). The range of scores was 0-15. To calculate final punctuations on a 10-point scale, the following formula was applied: number of right answers – number of mistakes/2 x[8]0.66. The results obtained allow us to establish four groups of academic qualifications (under Spanish University System of marks): insufficient (0-4.9), sufficient (C; 5-6.9), notable (B; 7-8.9), outstanding (A; 9-10).

3. *Audiovisual material*. The video used in the audiovisual class lasted 10' and 30". The material chosen was a fragment of a documentary titled «It is possible». The video was displayed in streaming in the virtual learning platform ILIAS (http://ev.ujaen.es/formacion/goto_formacion_pg_49252_28556.html). This virtual context allows to shortcut to an external link (for instance to *Youtube*), or to upload the file (ready to be downloaded by the students). In the present study, a learning module was especially created to embed it, which allows seeing the video in streaming. We selected video streaming to ensure that the video was visualized in a controlling environment without distractions and into a docent framework. The content describes the concept of family treatment teams, the institutional dependence of

8. This number is the result of weighting the value of each item on a 10-point scale (10/15).

this service, the kind of work developed and the areas of intervention (protection and prevention of child removal). Subsequently, two real cases and coordination meetings appear. The interventional procedure can also be deduced.

Results

To provide information about our research objectives we carried out contingency tables, analysis of variance and correlations. The one-way analysis of variance (ANOVA)[9] was used to determine whether there were any significant differences between the means of our dependent variables groups. Regarding cross tab, the significance of the difference between different groups of the variables studies was assessed with Pearson's chi-squared test. Finally, the analysis of bivariate correlations allowed us to measure how the performance and the satisfaction were connected.

First, we analyzed the effect of the factor «condition» on the General Satisfaction Scale and its dimensions. The general descriptive data are shown in Table 3.

The data reflect significant differences in the «materials quality» by condition (Figure 1). Students attending face-to-face class considered that the quality of the material used was higher comparing with those in the audiovisual condition, $F(1, 117) = 8.96$, $p = .003$. There were also differences among students assigned to one of the conditions regarding with «acquisition of skills». Specifically, participants in the audiovisual condition assessed better the acquisition of skills than those in the face-to-face condition, $F(1, 117) = 9.24$, $p = .003$. The last dimension in which differences were found was «cognitive processes». Participants in the audiovisual class showed higher scores in this dependent variable in contrast to the other ones, $F(1, 117) = 4.43$, $p = .037$. There were no differences by condition in the rest of the dimensions, i.e. «total satisfaction», $F(1, 117) = 0.65$, $p = .421$, «acquisition/consolidation of theoretical knowledge», $F(1, 117) = 0.56$, $p = .453$, «overall satisfaction», $F(1, 117) = 1.19$, $p = .278$.

Second, the effect of the factor «condition» on the performance (evaluated through the Performance Test) was no statistically significant, $F(1, 117) =$

9. Analysis of Variance (ANOVA) is one of the most widely used techniques in the analysis of data from experimental designs. It is used to compare more than two means. ANOVA is a very flexible method which enables to build statistical models in very different circumstances. It is, basically, a procedure that allows you to split the variance of the dependent variable in two or more components that can be attributed to an identifiable source (variable or factor) (http://www.ugr.es/~imartin/ TEMA5_ANOVA.pdf).

Table 3. Descriptive data of the General Satisfaction Scale by condition

		M[1]	*SD*[2]	*Standard error*	*Minimum*	*Maximum*
Total Satisfaction	Face-To-Face	3.65	0.46	.059	2.33	4.73
	Audiovisual	3.72	0.47	.060	2.00	4.60
Materials quality	Face-To-Face	3.91	0.68	.088	1.33	5.00
	Audiovisual	3.54	0.65	.084	2.00	5.00
Skills	Face-To-Face	3.73	0.66	.086	2.00	5.00
	Audiovisual	4.09	0.63	.081	2.75	5.00
Theory	Face-To-Face	3.66	0.54	.069	2.00	5.00
	Audiovisual	3.59	0.52	.068	2.25	4.50
Cognitive Processes	Face-To-Face	3.18	0.64	.083	1.67	4.33
	Audiovisual	3.45	0.73	.094	1.00	5.00
Overall Satisfaction	Face-To-Face	3.98	0.75	.098	3.00	5.00
	Audiovisual	4.15	0.92	.120	1.00	5.00

1. M = Mean
2. SD = Standard Deviation

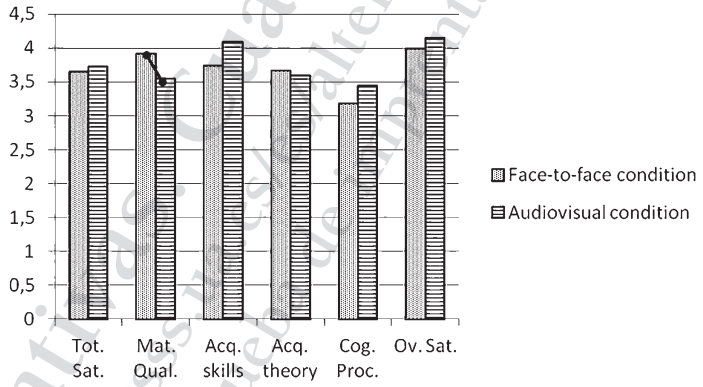


Figure 1. Mean differences of the General Satisfaction Scale by condition.

0.10, p =.752. The contingency tables, carried out with the categorical groups created from the ratings, either showed relationships between groups of variables, $\chi^2(3) = 3.07$, p =.380. Descriptive data are compiled in Table 4.

Table 4. Descriptive data of the Performance Test by condition

		Performance groups				Total
		Insufficient	Sufficient	Notable	Outstanding	
Condition	Face-to-face	25	17	14	3	59
	Audiovisual	22	25	11	1	59
Total		47	42	25	4	118

In another set of analyses, the existence of differences on the dependent variables according to sex and shift was analyzed (see the descriptive data in Tables 5 and Figure 2). Regarding the sex, two significant differences were found. On one hand, women considered that the quality of the material used was higher compared with men, $F(1, 117) = 4.57$, $p = .034$. On the other hand, men obtained higher grades on average than women in the Performance Test, $F(1, 117) = 3.92$, $p = .050$ (Figure 2). In the rest of dimensions, participant's sex had no influence on the scores (all the *p-values* were >.05).

Table 5. Descriptive data of the General Satisfaction Scale and Performance Test by sex

		M	*SD*	*Standard error*	*Minimum*	*Maximum*
Total Satisfaction	Men	3.68	0.51	.116	2.33	4.40
	Women	3.69	0.45	.045	2.00	4.73
Materials quality	Men	3.42	0.90	.206	1.33	5.00
	Women	3.78	0.63	.063	2.00	5.00
Skills	Men	4.05	0.56	.127	2.75	5.00
	Women	3.88	0.69	.069	2.00	5.00
Theory	Men	3.60	0.57	.130	2.00	4.50
	Women	3.63	0.52	.052	2.25	5.00
Cognitive Processes	Men	3.40	0.74	.170	2.00	4.33
	Women	3.30	0.69	.069	1.00	5.00
Overall Satisfaction	Men	4.10	0.81	.185	3.00	5.00
	Women	4.06	0.85	.085	1.00	5.00
Performance	Men	5.98	2.48	.570	1.00	10.00
	Women	4.95	1.97	.198	1.00	9.01

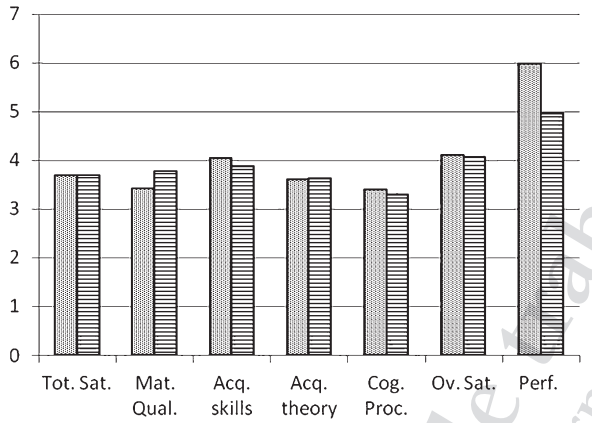
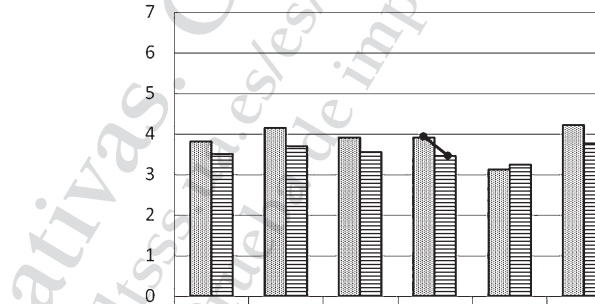


Figure 2. Mean differences of the General Satisfaction Scale and Performance Test by sex.

Focusing on the results, and taking the shift into account, the ANOVA displayed that participants in the morning shift and face-to-face condition valued more positively the material quality, $F(1, 58) = 7.30$, $p = .009$, the acquisitions of skill, $F(1, 58) = 4.22$, $p = .044$, and the acquisition/consolidation of theoretical content, $F(1, 58) = 10.89$, $p = .002$, compared with participants in the same condition but different shift. In general, students in the morning shift got a total score in the General Satisfaction Scale higher than those in the afternoon shift, $F(1, 58) = 7.14$, $p = .010$. Moreover, those into the face-to-face condition and morning shift obtained better results in the Performance Test, $F(1, 58) = 5.11$, $p = .028$ (see Table 6 and Figure 3). None of these differences



	Tot. Sat.	Mat.Qual.	Acq. Skills	Acq. Theory	Cog. Proc.	Ov. Sat.	Perf.
Morning shift	3,81	4,15	3,91	3,9	3,13	4,21	5,77
Afternoon shif	3,51	3,7	3,56	3,46	3,24	3,77	4,41

Figure 3. Mean differences of the General Satisfaction Scale and Performance Test by shift in the face-to-face condition.

Table 6. Descriptive data of the General Satisfaction Scale and Performance Test by shift in the face-to-face condition.

		M	*SD*	*Standard error*	*Minimum*	*Maximum*
Total Satisfaction	Morning	3.81	0.42	.079	2.87	4.73
	Afternoon	3.51	0.44	.080	2.33	4.47
Materials quality	Morning	4.15	0.60	.114	2.67	5.00
	Afternoon	3.70	0.68	.122	1.33	5.00
Skills	Morning	3.91	0.55	.104	2.50	4.75
	Afternoon	3.56	0.71	.129	2.00	5.00
Theory	Morning	3.90	0.48	.092	2.75	5.00
	Afternoon	3.46	0.50	.090	2.00	4.25
Cognitive Processes	Morning	3.13	0.58	.110	2.00	4.00
	Afternoon	3.24	0.68	.123	1.67	4.33
Overall Satisfaction	Morning	4.21	0.78	.148	3.00	5.00
	Afternoon	3.77	0.66	.120	3.00	5.00
Performance	Morning	5.77	1.87	.446	1.00	10.00
	Afternoon	4.41	2.22	.405	1.00	9.01

Table 7. Correlations between performance and the satisfaction.

	1	2	3	4	5	6	7
Perform.	-						
Tot. Sat.	.238(**)	-					
Mat. Qual.	.157	.668(**)	-				
Adq. Skills	.175	.701(**)	.144	-			
Adq. Theory	.236(*)	.813(**)	.564(**)	.418(**)	-		
Cog. Proc.	.089	.664(**)	.289(**)	.316(**)	.377(**)	-	
Ov. Sat.	.213(*)	.658(**)	.454(**)	.392(**)	.526(**)	.298(**)	-

** The correlation is significant at.01(bilateral).
*The correlation is significant at.05(bilateral).

were found in participants of the audiovisual condition by shift (all p-values were >.005).

Finally, to test if there were any relationship between the performance in the «Performance Test» with the satisfaction in the dimensions of the «General Satisfaction Scale» a test for bivariate correlation was used (Table 7).

The results showed a positive relationship between participant's performance and the follow three categories related with satisfaction: (1) total score in the «General Satisfaction Scale», r =.238, p =.05, (2) the acquisition/consolidation of theoretical content, r =.236, p =.05, and (3) overall satisfaction, r =.213, p =.05.

Discussion

The lack of opportunities to receive the practical training in real contexts to develop a successful professional future has motivated the use of various innovative methods. Many of them are based on information technologies, such as audiovisual materials. Many authors have pointed out that the gap between traditional and distance learning has been cut down by the introduction of innovative technologies and online learning in traditional education, influencing face-to-face classes (Miller & King, 2003). We recognize this blended trend in Social Work Degree at The University of Jaén. As a result, we decided to develop the present study focused on the video-cases considering that it is a proper way to link theory and practice and to provide skills in educational spaces. This consideration is opposite to Laurillard (1995) one, who describes video as, primarily, a narrative medium that does not, easily and on its own, support active learning. Because of this divergence of views, we decided to approach this reality. Besides, precisely because their widespread use, it becomes necessary to understand the impact and benefits of videos on students learning. Thus, the key of the present research is to evaluate whether videos are the best way to facilitate the practical training. Specifically, the double aim of the study was to assess the effect of a video on students satisfaction in different areas (e.g., material quality, acquisition of skills or acquisition of theory), and the performance on a test that measures short-term learning.

Focusing on the results, significant differences have been found. The results related to the effect of the factor «condition» on the dependent variable «satisfaction» show that students who received the class using a video perceived that all the issues refer to the acquisition of skills were better than those in the face-to-face lesson. This data means that, according to students´ perception, video-cases constitute a properly method to learn real applications, processes and techniques, skills and practical cases. In addition, those participants who visualized the video assessed it more positively than participants in face-to-face class regarding with the cognitive processes that facilitates. They affirmed that the video makes the memorization of the contents as well as paying attention easier. They also considered that it involves a reduction of time employed to learn. This set of data confirmed the boundaries of

audiovisual material founded in relevant studies into the field of information technologies (e.g., García-Carbonell, et al., 2001; Kendon, 2004; Thorne & Reinhardt, 2008; Zheng, Young, & Wagner, 2009 in Masats & Dooly, 2011). The key knowledge that emerges from our results is the specification of what content and what kind of processes could be better taught and learned through videos. Not all type of learning contents could benefit from the use of video: theory and its learning could be providing under similar standards in virtual and face-to-face contexts. Meanwhile, practical issues are better acquired using videos. This result is in line with the basic assumption of pedagogy, *learn by doing* (Okamoto, 1995), or by seeing others doing as reflect the videomodelling application. In contrast, students attending face-to-face classes –compared with those in the video classes–, considered on a higher level that the theoretical concepts were clearly explained, the duration was suitable to obtain a global view, and the class was adapted to the educational level and stage. Therefore, it can be deduced that both conditions produced satisfaction in different aspects.

Participant's performance concerning the content understanding and memorization was similar in both conditions. Therefore, regardless of receiving the information through video or lecture, students almost scored the same. Thus, it seems that the reproduction of information still included in the[10]working memory does not experiment differences depending of the use of video-case or face-to-face explanation. Although, curiously, participants in the audiovisual conditions perceived that the cognitive processes such as attention or memorization are better than those attending to the face-to-face class.

Another two variables were analyzed in the study: sex and shift. Taking our sample as a starting point, the results showed that men scored better in the Performance Test. This could be explained by the under-representation of men in Social Work degree. In Degrees where a group is a minority, its members can be judged based on their membership and the stereotypes associated with this group, what produces the process named stereotype threat (Hausmann, 2014). In general studies about academic develop in groups that suffer stereotype threat found that their performance decreases when the stereotypes are primed (Furrer, 2004). However, the self-consciousness of being member of this minority group may increase motivational processes to afford this unequal situation.

10. Working memory refers to temporary memory «on line» that humans use to perform certain tasks and solve problems. The concept was first used by Baddeley & Hitch in 1974 and has subsequently undergone various reformulations.

The widespread effect found was relevant considering the shift in the dependent variable only in the face-to-face condition. Students in the morning shift compared with those in the afternoon shift showed a more positive assessment in the total score of the General Satisfaction Scale, and also in three of its dimensions: material quality, acquisition of skills, and acquisition/consolidation of theoretical content. Moreover, the scores in the Performance Test were higher in the morning shift than in the afternoon one. We note that none of the following results have been found in the audiovisual condition. At this point, it can be considered as explanation the objectivity links to the use of videos vs. the variability introduced by lectures. Teacher-students interaction is a complex and dynamic process that generates, even in the present study where the variability was controlled, different outcomes. However, we do not consider this feature (objectivity/ variability) related with the method used a disadvantage. Depending on the effect that teachers want to produce on their students, any of the two contexts can be chosen: audiovisual or face-to-face. In any case, the simultaneous use of videos with the contributions of teacher becomes the simple visualization of material in reflective thoughts and critical evaluations of what they are seeing and hearing (Masats & Dooly, 2011).

The final set of analysis provided information about the relation between satisfaction and performance. As participants obtained better scores on the Performance Test, they increased the mean scores in the General Satisfaction Scale, and specifically in the dimensions of satisfaction with the acquisition/ consolidation of theoretical content, and overall satisfaction.

In sum, taking into account our results, clearly, learning methods based on videos are highly efficient. However it is necessary to take into account that their boundaries are salient especially with some type of contents (practical vs. theoretical). In addition, context seems to be crucial, not only in the face-to-face teaching, but also regarding the use of videos. It is worth highlighting that even if the content of the video is interesting, viewing only becomes educational if it is properly exploited in the classroom.

Conclusions

According to our results, a blended learning would be the ideal process to obtain knowledge and skills in Social Work. The introduction of technology and online in social work has caused controversy between those who support new models of education that incorporate technology and those concerned about the possible minimization of human interaction. Our research indicates that a proper blended learning (master class and on-line learning) would increase benefits associated with both traditional and innovative methods. Focusing

on videos, Shepard (2003) exposes that when technical possibilities are integrated with pedagogically designed tools, the educational functions of video potentially extend far beyond the narrative. It is particularly important in disciplines based on social intervention. The difficulty to access to real cases and the necessity to develop skills of real intervention in complex cases makes necessary to seek new learning tools. With the aim of assessing the benefits of using videos with a pedagogical purpose, we undertook this research, whose results underline the following: the videos are a useful and successful tool to teach skills and practical contents, moreover this virtual context seems to positively affect some cognitive processes such as attention and memory. Both results are related to the metacognitive perception of students evaluated. The effect of the use of one method or the other in the performance was no statistically significant, providing us information about working memory. Apart from these results, another set of analysis with participant's sex and shift as dependent variables added complementary information. On one hand, data showed the role of psychological processes (stereotype threat) in motivation and performance. On the other hand, one relevant feature was associated with video and face-to-face class: objectivity and variability, respectively.

In the future, we plan to continue with this research line and to study the benefits of videos through other video-cases (of different lengths), other types of videos, and also other ways of approaching, such as a studying it from a qualitative approach. Besides, we have just opened an opinion forum aimed at improving and detecting possible failures. We intend to consolidate it as a dynamic tool. Lastly, we are going to suggest students to get involved in a video-coaching project, which expects to help future generations of students in the acquisition of practical knowledge.

We conclude that a mixed system (face-to-face classes and audiovisual tools) would increase the level of satisfaction, involvement and acquisition of knowledge and practical skills of social work students. Skills such as interacting in risk situations, promoting individual and groups' development and working in multidisciplinary teams can be acquired in the class through this blended method when they cannot be acquired in real contexts. This present a strength for Social Work discipline which increase the motivation of students and, in last term, could even improve their employability.

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